

Answer all the questions below then check your answer when you are done.

1. Decide if the substances below are elements or compounds and place them in the correct place in the table.

Oxygen carbon dioxide iron copper chloride sodium oxide potassium gold silver

Magnesium nitride iron sulfide magnesium oxide mercury nickel phosphorus

element	compound

2. The table below gives the names and formula for a number of substances. Complete the table.

Name of compound	Chemical	Names of the elements present
	formula	
Sodium chloride	NaCl	
Magnesium oxide	MgO	
Iron sulfide	FeS	
Calcium carbonate	CaCO3	
Magnesium nitrate	MgNO₃	

3. The table below shows some molecules. Some of these molecules are compounds and some are elements. Complete the table by filling in all the boxes.

Substance name	Element or compound	Particle picture	Chemical formula	Number of atoms present in the molecule
chlorine		<u> </u>	Cl ₂	
water				
Carbon dioxide				3
methane			CH4	
methanol			СН₃ОН	

	4.	Complete	the	following	word	equation
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a. sodium + chlorine

b. iron + oxygen

c. magnesium + bromine

d. copper + chlorine -

e. + + lithium sulfide

f. + aluminium iodide

Answers

1. Decide if the substances below are elements or compounds and place them in the correct place in the table.

Oxygen carbon dioxide iron copper chloride sodium oxide potassium gold silver

Magnesium nitride iron sulfide magnesium oxide mercury nickel phosphorus

element	compound
oxygen	Carbon dioxide
iron	Copper chloride
potassium	Sodium oxide
gold	Magnesium nitride
silver	Iron sulfide
mercury	Magnesium oxide
nickel	
phosphorus	

2. The table below gives the names and formula for a number of substances. Complete the table.

Name of compound	Chemical	Names of the elements present	
	formula		
Sodium chloride	NaCl	Sodium chlorine	
Magnesium oxide	MgO	Magnesium oxygen	
Iron sulfide	FeS	Iron sulfur	
Calcium carbonate	CaCO ₃	Calcium carbon oxygen	
Magnesium nitrate	MgNO ₃	Magnesium nitrogen oxygen	

3. The table below shows some molecules. Some of these molecules are compounds and some are elements. Complete the table by filling in all the boxes.

Substance name	Element or compound	Particle picture	Chemical formula	Number of atoms present in the molecule
chlorine	element	<u>•</u>	Cl ₂	2
water	compound		H ₂ O	3
Carbon dioxide	compound		CO ₂	3
methane	compound		CH4	5
methanol	compound		СН₃ОН	6

4. Complete the following word equations.

a. sodium + chlorine

sodium chloride

b. iron + oxygen → iron oxide

c. magnesium + bromine — magnesium bromide

d. copper + chlorine

→ copper chloride

e. lithium + sulfur lithium sulfide

f. aluminium + iodine aluminium iodide